

Terrazzo Cracking









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16. Abstract

Terrazzo is generally a versatile, durable and low maintenance flooring material. However, widespread terrazzo cracking has occurred in several elevated walkway bridge structures at Logan International Airport. Cracking was broadly defined to include separation of terrazzo from divider strips and deterioration from impact loadings. Cracking typically occurred shortly after opening of the walkways, but some new cracking has appeared after a period of time in service. Installation techniques and construction methods were altered during construction of individual pedestrian bridge structures to mitigate problems as they were discovered and some repairs have been completed. While the extent of cracking varies in the elevated walkways some cracking has occurred in all elevated walkways.

The objectives of this research project were to determine the causes of terrazzo cracking at the walkway bridge structures at Logan International Airport develop specifications for terrazzo installation to prevent cracking in future structures and develop guidelines for repairing existing cracks. In order to provide a means for impacting current practice, QA/QC and implementation procedures were also addressed. This report also serves as documentation of advancements in terrazzo construction practice for terrazzo implemented in recent Massachusetts Port Authority projects.

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